

Cooney and Deadman's Basin Dams-Automated Instrumentation Project (RRGL Rank 74)

Cooney and Deadman's Basin dams are both "high-hazard" earthen embankment dams built in the late 1930's. Cooney is located 6 miles northwest of Roberts, Montana, and Deadman's Basin is located 8 miles west of Ryegate, Montana. The dams are classified "high hazard" due to the potential for loss of life below the dams, should the dams fail.

- Cooney Dam: built in 1937, 28,140 acre-feet capacity with 21,770 Shares marketed. Irrigates approx 20,000 acres.
- Deadman's Dam: built in 1941, enlarged 10-feet in 1958 to 76,000 acre-feet capacity with 40,500 Shares marketed. Irrigates approx 34,000 acres.

The Water Users Associations rely on Cooney and Deadman's reservoirs for their livelihood. The ability monitor daily the reservoir levels and outflows enhances water management practices. This allows for accurate flow adjustments and distribution of decreed and contract water throughout the irrigation season which in turn minimizes conflicts and maximizes the beneficial uses of the water.

Dam safety operations through better management of reservoir levels and outflows are enhanced. Developing dam safety or gate operation problems typically cause immediate changes in downstream flows and over time, reservoir elevations. Timely notification of these changes (daily readings) allows for effective, and even proactive, response times.

For both dams, the project consists of the following:

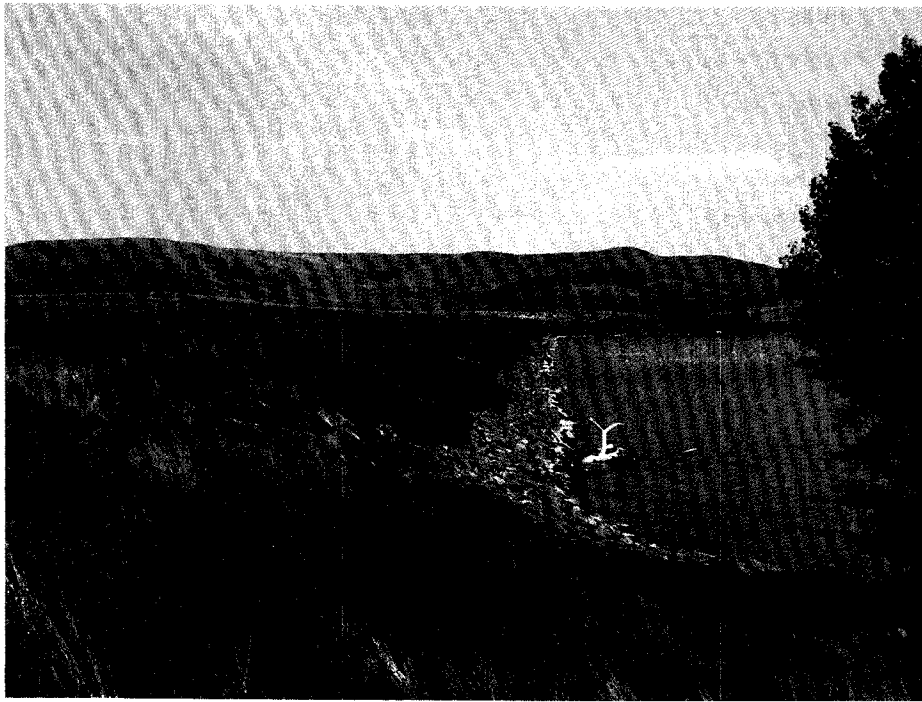
1. Install instrumentation in the reservoir that will automatically measure reservoir levels and send that information back to the State Water Projects Bureau (SWPB) in Helena. The Water Users Association (WUA) would also have access to near real time digital data for reservoir elevation at the dam.
2. Install instrumentation in the downstream channels to measure outlet flows from the dams. At Deadman's Basin, the data would be stored on-site for the WUA and Water Commissioner to review daily when needed and downloaded on a regular basis for SWPB review. At Cooney Dam, the outflow data would be downloaded with the reservoir data.

Cooney and Deadman's reservoirs have provided a means of storing, conserving and utilizing Montana's water resources for seven decades. The resulting benefits to Montanans are manifested in the continued sustainment of the agricultural economy of the area and ever increasing recreational uses.

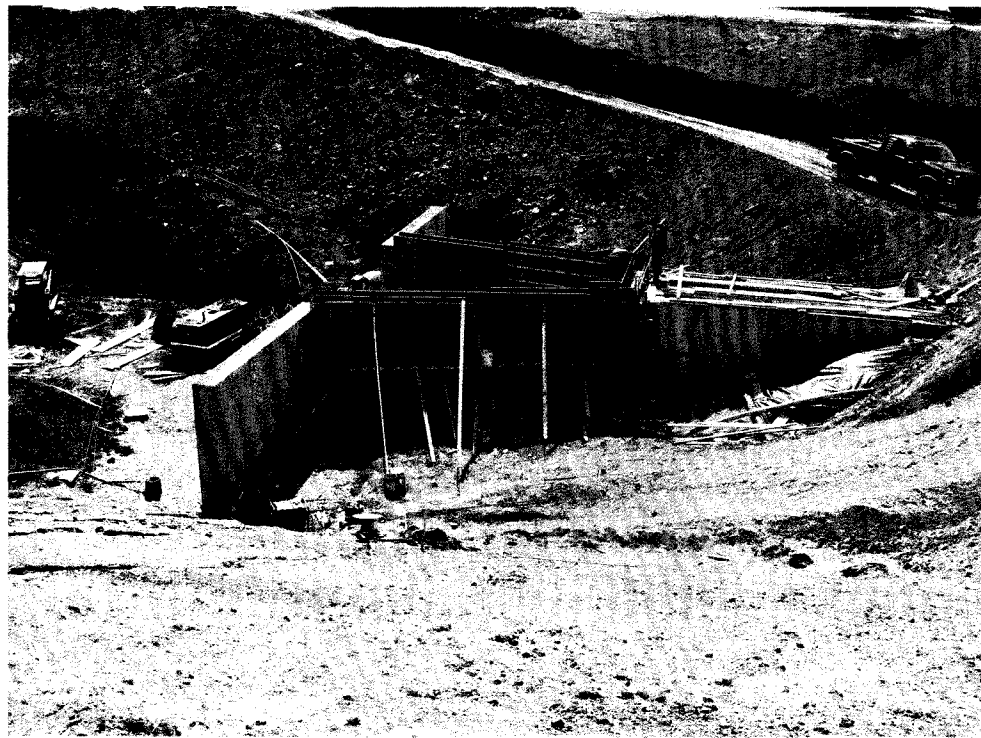
Proposed Project Budget		
Funding Source (grant/loan or cash reserves)	Amount	Committed/Uncommitted
RRGL Grant	\$100,000.00	Uncommitted
DNRC In-Kind Services	\$ 18,651.20	Committed
	\$ 486.20	Water Storage Account
	\$	
TOTAL	\$119,137.40	

Note: Committed monies must have a written letter committing funds to the project.

Estimated Total Project Cost \$ 119,137.40



Cooney Dam (Carbon Co.)



New terminal outlet construction at Deadman's Basin Dam (2009)